City of Indianapolis
DPW
Department of Public Works
Bart Peterson, Mayor

TO: Interested Parties / TIN Inc., d/b/a Temple-Inland, Stout Field

RE: TIN Inc., d/b/a Temple Inland / MSOP 097-22963-00314

FROM: Felicia A. Robinson
Administrator
Office of Environmental Services
City of Indianapolis

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within fifteen (15) calendar days of the receipt of this notice.** The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Indianapolis Office of Environmental Services, Air Permits, Carmen Bugay of my staff via e-mail at cbugay@indygov.org or by phone at (317) 327-2512.

Enclosures

Department of Public Works
Office of Environmental Services
2700 Belmont Avenue
Indianapolis, IN 46221
317-327-2234
Fax 327-2274
TDD 327-5186
indygov.org/dpw

City of Indianapolis
DPW
Department of Public Works
Bart Peterson, Mayor

Certified Mail#: 7000 0600 0023 5186 3740

August 25, 2006

Mr. Nick Walton, Environmental Engineer
Temple-Inland Applied Technology Center
5146 W. 79th Street
Indianapolis, Indiana 46268

Re: 1st Minor Permit Revision, 097-22963-00314, to MSOP 097-14600-00314.

Dear Mr. Walton:

TIN Inc., d/b/a Temple-Inland, located at 2135 Stout Field Drive East, Indianapolis, Indiana 46241, was issued a Minor Source Operating Permit (MSOP 097-14600-00314) on September 23, 2003, relating to the flexographic printing and paperboard production.

On April 17, 2006, an application was received for the addition of Automatan Labeler (EU-022) and the removal of Staley (EU-005) die cutter and Jabengerg (EU-010) gluer from the flexopraphic printing press operations.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Carmen Bugay of my staff via e-mail at cbugay@indygov.org or phone at (317) 327-2512.

Sincerely,

Felicia A. Robinson
Administrator

FAR/cmb

Attachments: Technical Support Document (TSD)
Revised MSOP

cc: Rick Wheeler, General Manager, TIN Inc., d/b/a Temple-Inland
Mindy Hahn, IDEM, OAQ
U.S. EPA Region V
Marion County Health Department
Matt Mosier, OES, Air Compliance
OES files (3)

Department of Public Works
Office of Environmental Services
2700 Belmont Avenue
Indianapolis, IN 46221
317-327-2234
Fax 327-2274
TDD 327-5186
indygov.org/dpw

City of Indianapolis
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Department of Public Works
Bart Peterson, Mayor

MINOR SOURCE OPERATING PERMIT
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
CITY OF INDIANAPOLIS
OFFICE OF ENVIRONMENTAL SERVICES

TIN Inc., d/b/a Temple-Inland
2135 Stout Field Drive East
Indianapolis, Indiana 46241

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 097-14600-00314	
Issued by: ORIGINALLY SIGNED BY John B. Chavez, Administrator Office of Environmental Services City of Indianapolis	Issuance Date: September 26, 2003 Expiration Date: September 26, 2008

1st Notice Only Change: 097-18227-00314	Issuance Date: October 31, 2003

2nd Notice Only Change: 097-18930-00314	Issuance Date: September 3, 2004

3rd Notice Only Change: 097-23222-00314	Issuance Date: June 23, 2006
1st Minor Permit Revision: 097-22963-00314	Conditions Modified: A.2, B.12, D.1, D.1.1, D.2, D.3 & D.4.
Issued by: Felicia A. Robinson Administrator Office of Environmental Services	Issuance Date: August 25, 2006 Expiration Date: September 26, 2008

Department of Public Works
Office of Environmental Services
2700 Belmont Avenue
Indianapolis, IN 46221
317-327-2234
Fax 327-2274
TDD 327-5186
indygov.org/dpw

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Indianapolis Office of Environmental Services (OES). The information describing the source contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary paperboard production plant.

Authorized Individual:	Plant Manager
Source Address:	2135 Stout Field Drive East, Indianapolis, Indiana 46241
Mailing Address:	2135 Stout Field Drive East, Indianapolis, Indiana 46241
General Source Phone:	(317) 390-3300
SIC Code:	2653
County Location:	Marion County
Source Location Status:	Non-attainment for Ozone under the 8-hr standard; and Nonattainment for PM-2.5; Attainment for all other criteria pollutants.
Source Status:	Minor Source, under PSD, Emission Offset Rules, and Nonattainment New Source Review.

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

(a) One (1) Peters, Single Star paperboard corrugator, identified as emission unit 001 (EU-001), installed in 1989, with a maximum capacity of seven hundred (700) feet per minute, using a cyclone to collect trim paper, identified as 015, installed in 1989, and exhausting to stack S-002.

(b) One (1) Cuir, Mark II six (6) color flexographic printing press, identified as EU-002, installed in 1996, with a maximum operating capacity of 8,000 sheets per hour, and exhausting inside the building.

(c) One (1) Saturn II two (2) color flexographic printing press, identified as EU-003, installed in 1989, with a maximum operating capacity of 14,000 sheets per hour, and exhausting inside the building.

(d) One (1) Ward, two (2) color rotary die cutter, identified as EU-004, installed in 1989, with a maximum operating capacity of 8,000 sheets per hour, using a cyclone to collect trim paper, identified as 015, and exhausting to stack S-002.

(e) One (1) McKinley, two (2) color rotary die cutter, identified as EU-006, installed in 1989, with a maximum operating capacity of 6,000 sheets per hour, using a cyclone to collect trim paper, identified as 014, and exhausting to stack S-002.

(f) One (1) United four (4) color rotary die cutter, identified as EU-007, installed in 2001, with a maximum operating capacity of 10,800 sheets per hour, using a cyclone to collect trim paper, identified as 014, and exhausting to stack S-002.

(g) Two (2) Bobst platen die cutters, identified as EU-008 and EU-009, installed in 1994 and 2000 respectively, each with a maximum operating capacity of 10,000 sheets per hour, using a cyclone to collect trim paper, identified as 015, and exhausting to stack S-002.

(h) Three (3) Jagenberg, J&L and Post specialty folder gluers, identified as EU-011, EU-012, and EU-013, installed in 1998, 1994, and 2001 respectively, with a collective maximum glue usage of 179.75 pounds per hour, using no controls, and exhausting inside the building.

(i) One (1) Cleaver Brooks natural gas fired boiler, identified as EU-016, installed in 1988, with a maximum heat input capacity of 14.675 million Btu per hour (MMBtu/hr), exhausting to stack S-003.

(j) One (1) corn-based starch silo, identified as EU-017, installed in 1999, with a maximum annual capacity for starch throughput of 2,000 tons per year, controlled by a baghouse, and exhausting to stack S-004.

(k) Two (2) Automaton label laminators, identified as emission units EU-018 and EU-022, installed in 1994 and 2006 respectively, with a maximum operating capacity of 6,000 and 7,000 sheets per hour respectively, both exhausting inside the building.

(l) Two (2) International Speed King tapers, identified as EU-019 and EU-023, installed in 2001 and 2006 respectively, each with a maximum operating capacity of 15,000 sheets per hour, each with emissions below 1 ton per year (tpy) and exhausting inside the building.

(m) One (1) Heritage Crystal Clean small parts washer, identified as EU-020, installed in 2003, with a maximum usage of less than 0.01 gallons per day, exhausting inside the building.

SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [40 CFR 124]

Pursuant to 40 CFR 124.15, 40 CFR 124.19, and 40 CFR 124.20, this permit will become effective immediately upon its issuance if no comments requested a change in the draft permit. If a comment is received which requests a change, the effective date of this permit will be thirty (30) days after the service of notice of the decision. If the final day of the thirty (30) day time period falls on a weekend or legal holiday, the time period shall be extended to the next working day.

B.4 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Local Agency Requirement

An application for an operation permit must be made ninety (90) days before start up to:

City of Indianapolis
Office of Environmental Services (OES)
Air Permits
2700 South Belmont Avenue
Indianapolis, Indiana 46221

The operation permit issued by OES shall contain as a minimum the conditions in the Operation Conditions section of this permit.

B.7 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, IN 46204-2251

and

City of Indianapolis
Office of Environmental Services
Air Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES on or before the date it is due.

B.8 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

City of Indianapolis
Office of Environmental Services
Air Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMP's shall be submitted to IDEM, OAQ, and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and OES. IDEM, OAQ, and OES may require the Permittee to revise its PMP whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.9 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

City of Indianapolis
Office of Environmental Services
Air Permits
2700 South Belmont Avenue
Indianapolis, Indiana 46221

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.10 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, or OES, or U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.11 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch and OES, within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ, and OES shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

B.12 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to OES within thirty (30) calendar days of receipt of a billing.

(b) The Permittee may call the following telephone number: 317-327-2234 (ask for OES Air Compliance), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM and OES, the fact that continuance of this permit is not consistent with purposes of this article.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.4 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

City of Indianapolis
Office of Environmental Services
Enforcement Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements

C.5 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue,
Indianapolis, Indiana 46204-2251

and

City of Indianapolis
Office of Environmental Services
Air Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

no later than thirty-five (35) days prior to the intended test date.

(b) The Permittee shall notify IDEM, OAQ and OES of the actual test date at least fourteen (14 days) prior to the actual date.

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, and OES not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, and OES if the source submits to IDEM, OAQ, and OES a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.6 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements

C.7 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.8 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to

the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.9 Compliance Response Plan - Preparation and Implementation

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ, and the City of Indianapolis, OES upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall constitute a violation of the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

Record Keeping and Reporting Requirements

C.10 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.11 General Record Keeping Requirements [326 IAC 2-6.1-5]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or the City of Indianapolis, OES makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or the City of Indianapolis, OES within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.12 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

City of Indianapolis
Office of Environmental Services
Air Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and the City of Indianapolis, OES on or before the date it is due.

(c) Unless otherwise specified in this permit, any reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

(a) One (1) Peters, Single Star paperboard corrugator, identified as emission unit 001 (EU-001), installed in 1989, with a maximum capacity of seven hundred (700) feet per minute, using a cyclone to collect trim paper, identified as 015, installed in 1989, and exhausting to stack S-002.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate emissions from the paperboard corrugator shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

The process weight rate for the corrugator is 21.3 tons per hour. Therefore, the allowable rate of emission in pounds per hour is 31.8 pounds per hour. The source is in compliance with a potential to emit 17.0 pounds per hour.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

(h) Three (3) Jagenberg, J&L and Post specialty folder gluers, identified as EU-011, EU-012, and EU-013, installed in 1998, 1994, and 2001 respectively, with a collective maximum glue usage of 179.75 pounds per hour, using no controls, and exhausting inside the building.

(j) One (1) corn-based starch silo, identified as EU-017, installed in 1999, with a maximum annual capacity for starch throughput of 2,000 tons per year, controlled by a baghouse, and exhausting to stack S-004.

(k) Two (2) Automaton label laminators, identified as emission units EU-018 and EU-022, installed in 1994 and 2006 respectively, with a maximum operating capacity of 6,000 and 7,000 sheets per hour respectively, both exhausting inside the building.

(l) Two (2) International Speed King tapers, identified as EU-019 and EU-023, installed in 2001 and 2006 respectively, each with a maximum operating capacity of 15,000 sheets per hour, each with emissions below 1 ton per year (tpy) and exhausting inside the building.

(m) One (1) Heritage Crystal Clean small parts washer, identified as EU-020, installed in 2003, with a maximum usage of less than 0.01 gallons per day, and exhausting inside the building.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

SECTION D.3 **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-6.1)]:

(b) One (1) Cuir, Mark II six (6) color flexographic printing press, identified as EU-002, installed in 1996, with a maximum operating capacity of 8,000 sheets per hour, and exhausting inside the building.

(c) One (1) Saturn II two (2) color flexographic printing press, identified as EU-003, installed in 1989, with a maximum operating capacity of 14,000 sheets per hour, and exhausting inside the building.

(d) One (1) Ward, two (2) color rotary die cutter, identified as EU-004, installed in 1989, with a maximum operating capacity of 8,000 sheets per hour, using a cyclone to collect trim paper, identified as 015, and exhausting to stack S-002.

(e) One (1) McKinley, two (2) color rotary die cutter, identified as EU-006, installed in 1989, with a maximum operating capacity of 6,000 sheets per hour, using a cyclone to collect trim paper, identified as 014, and exhausting to stack S-002.

(f) One (1) United four (4) color rotary die cutter, identified as EU-007, installed in 2001, with a maximum operating capacity of 10,800 sheets per hour, using a cyclone to collect trim paper, identified as 014, and exhausting to stack S-002.

(g) Two (2) Bobst platen die cutters, identified as EU-008 and EU-009, installed in 1994 and 2000 respectively, each with a maximum operating capacity of 10,000 sheets per hour, using a cyclone to collect trim paper, identified as 015, and exhausting to stack S-002.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

SECTION D.4 **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-6.1]:

(i) One (1) Cleaver Brooks natural gas fired boiler, identified as EU-016, installed in 1988, with a maximum heat input capacity of 14.675 million Btu per hour (MMBtu/hr), exhausting to stack S-003.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.4.1 Particulate Emissions Limitations for Sources of Indirect Heating [326 IAC 6-2]

Pursuant to 326 IAC 6-2-1(d), particulate emissions from indirect heating facilities shall be limited by the following equation:

$Pt = 1.09/Q^{0.26}$

where Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = Maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input of boiler.

Therefore, particulate emissions from the natural gas fired boiler shall not exceed 0.54 pounds per million Btu (lbs/MMBtu).

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.4.2 Reporting Requirements

(a) A certification, signed by the responsible official, that certifies all of the fuels combusted during the period. The natural gas-fired boiler certification does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR COMPLIANCE

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	**TIN Inc., d/b/a Temple-Inland**
Address:	**2135 Stout Field Drive East**
City:	**Indianapolis, Indiana 46202**
Phone #:	**(317) 390-3300**
MSOP #:	**097-14600-00314**

I hereby certify that TIN Inc., d/b/a Temple-Inland is ☐ still in operation. ☐ no longer in operation.
I hereby certify that TIN Inc., d/b/a Temple-Inland is:

☐ in compliance with the requirements of MSOP 097-14600-00314. ☐ not in compliance with the requirements of MSOP 097-14600-00314.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - (317) 233-6865
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
FAX NUMBER - (317) 327-2274

PAGE 1 of 1

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services

Technical Support Document (TSD) for a minor permit revision to a Minor Source Operating Permit (MSOP)

Source Background and Description

Source Name:	TIN Inc., d/b/a Temple-Inland, formerly Inland Paperboard and Packaging, Inc.
Source Location:	2135 Stout Field Drive East, Indianapolis, Indiana 46241
County:	Marion
SIC Code:	2653
Operation Permit No.:	097-14600-00314
1st Minor Revision No.:	097-22963-00314
Permit Reviewer:	Carmen Bugay

The Office of Environmental Services (OES) has reviewed an application from Inland Paperboard and Packaging, Inc. (herein referred to as "source") relating to the construction and operation of paperboard production.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) One (1) paperboard corrugation operation, identified as 001, installed in 1989, with a maximum capacity of seven hundred (700) feet per minute, using a cyclone, identified as 014, to collect trim paper, and exhausting to stack 002.

(b) One (1) six (6) color flexographic printing press, identified as 002, installed in 1996, with a maximum operating capacity of 8,000 sheets per hour, and exhausting to the atmosphere.

(c) One (1) two (2) color flexographic printing press, identified as 003, installed in 1989, with a maximum operating capacity of 14,000 sheets per hour, and exhausting to the atmosphere.

(d) One (1) two (2) color rotary die cutter, identified as 004, installed in 1989, with a maximum operating capacity of 8,000 sheets per hour, using a cyclone, identified as 015, to collect trim paper, and exhausting to stack 003.

(e) One (1) two (2) color rotary die cutter, identified as 005, installed in 1991, with a maximum operating capacity of 8,000 sheets per hour, using a cyclone, identified as 015, to collect trim paper, and exhausting to stack 003.

(f) One (1) two (2) color rotary die cutter, identified as 006, installed in 1989, with a maximum operating capacity of 6,000 sheets per hour, using a cyclone, identified as 015, to collect trim paper, and exhausting to stack 003.

(g) One (1) four (4) color rotary die cutter, identified as 007, installed in 2001, with a maximum operating capacity of 10,800 sheets per hour, using a cyclone, identified as 015, to collect trim paper, and exhausting to stack 003.

(h) Two (2) platen die cutters, identified as 008 and 009, installed in 1994 and 2000, respectively, each with a maximum operating capacity of 10,800 sheets per hour, using a cyclone, identified as 015, to collect trim paper, and exhausting to stack 003.

(i) Four (4) specialty folder gluers, identified as 010, 011, 012, and 013, installed in 1989, 1998, 1994, and 2001, respectively, with a collective maximum glue usage of 34.25 pounds per hour, using no controls, and exhausting to the atmosphere.

(j) One (1) natural gas fired boiler, identified as 016, installed in 1988, with a maximum heat input capacity of 14.675 million Btu per hour (MMBtu/hr), exhausting to stack 003.

(k) One (1) corn-based starch silo, identified as 017, installed in 1999, with a maximum annual capacity for starch throughput of 3,000 tons per year, controlled by a baghouse, and exhausting to stack 004.

(l) One (1) label laminator, identified as 018, installed in 1994, with no emissions.

(m) Two (2) tapers, identified as 019 and 023, installed in 2001 and 2006 respectively, each with emissions below 1 ton per year (tpy).

(n) One (1) small parts washer, identified as 020, installed in 2003, with a maximum usage of less than 0.01 gallons per day, exhausting to the atmosphere.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) 097-14600-00314, MSOP, issued on September 26, 2003;

(b) 097-18227-00314, 1st Notice-Only-Change (NOC), issued on October 31, 2003;

(c) 097-18930-00314, 2nd NOC, issued on September 3, 2004;

(d) 097-23222-00314, 3rd NOC, issued on June 23, 2006.

All conditions from previous approvals were incorporated into this minor permit revision.

Justification for the Revision

The MSOP is being revised through a Minor Permit Revision, pursuant to 326 IAC 2-6.1- 6(g)(4) and 2-6.1-6 (g)(5), as a modification that has a potential to emit less than 25 tons and greater than 10 tons per year of VOC, and does not require the use of air pollution control equipment to comply with provisions of 326 IAC 8.

Revision changes:

Two emission units were dismantled (005 and 010) and a laminator (EU-022) is proposed to be added as follows:

Deletions/Dismantled:

(a) One (1) Staley two (2) color rotary die cutter, identified as 005, installed in 1991, with a maximum operating capacity of 8,000 sheets per hour, using a cyclone, identified as 015, to collect trim paper, and exhausting to stack 003.

(i) One (1) Jagenberg specialty folder gluer, identified as 010, installed in 1989 and exhausting to the atmosphere.

Additions:

(k) One (1) Automaton label laminator, EU-022, installed in 2006, with a maximum operating capacity of 7,000 sheets per hour, exhausting inside the building.

Emission Units After Revision

Emission unit descriptions are being modified in this revision to reflect proper equipment and stack identification numbers. These revisions do not reflect physical changes at the source, but corrections to permit emission unit descriptions. Furthermore 005 and 010 are being deleted, and 022 is being added as follows:

(a) One (1) Peters, Single Star paperboard corrugator, identified as emission unit 001 (EU-001), installed in 1989, with a maximum capacity of seven hundred (700) feet per minute, using a cyclone to collect trim paper, identified as 015, installed in 1989, and exhausting to stack S-002.

(b) One (1) Cuir, Mark II six (6) color flexographic printing press, identified as EU-002, installed in 1996, with a maximum operating capacity of 8,000 sheets per hour, and exhausting inside the building.

(c) One (1) Saturn II two (2) color flexographic printing press, identified as EU-003, installed in 1989, with a maximum operating capacity of 14,000 sheets per hour, and exhausting inside the building.

(d) One (1) Ward, two (2) color rotary die cutter, identified as EU-004, installed in 1989, with a maximum operating capacity of 8,000 sheets per hour, using a cyclone to collect trim paper, identified as 015, and exhausting to stack S-002.

(e) One (1) McKinley, two (2) color rotary die cutter, identified as EU-006, installed in 1989, with a maximum operating capacity of 6,000 sheets per hour, using a cyclone to collect trim paper, identified as 014, and exhausting to stack S-002.

(f) One (1) United four (4) color rotary die cutter, identified as EU-007, installed in 2001, with a maximum operating capacity of 10,800 sheets per hour, using a cyclone to collect trim paper, identified as 014, and exhausting to stack S-002.

(g) Two (2) Bobst platen die cutters, identified as EU-008 and EU-009, installed in 1994 and 2000 respectively, each with a maximum operating capacity of 10,000 sheets per hour, using a cyclone to collect trim paper, identified as 015, and exhausting to stack S-002.

(h) Three (3) Jagenberg, J&L and Post specialty folder gluers, identified as EU-011, EU-012, and EU-013, installed in 1998, 1994, and 2001 respectively, with a collective maximum glue usage of 179.75 pounds per hour, using no controls, and exhausting inside the building.

(i) One (1) Cleaver Brooks natural gas fired boiler, identified as EU-016, installed in 1988, with a maximum heat input capacity of 14.675 million Btu per hour (MMBtu/hr), exhausting to stack S-003.

(j) One (1) corn-based starch silo, identified as EU-017, installed in 1999, with a maximum annual capacity for starch throughput of 2,000 tons per year, controlled by a baghouse, and exhausting to stack S-004.

(k) Two (2) Automaton label laminators, identified as emission units EU-018 and EU-022, installed in 1994 and 2006 respectively, with a maximum operating capacity of 6,000 and 7,000 sheets per hour respectively, both exhausting inside the building.

(l) Two (2) International Speed King tapers, identified as EU-019 and EU-023, installed in 2001 and 2006 respectively, each with a maximum operating capacity of 15,000 sheets per hour, each with emissions below 1 ton per year (tpy) and exhausting inside the building.

(m) One (1) Heritage Crystal Clean small parts washer, identified as EU-020, installed in 2003, with a maximum usage of less than 0.01 gallons per day, and exhausting inside the building.

Stack Summary

Stack ID	Emission Units*	Type/Shape	Height (feet)	Diameter (feet)	Length x Width (feet)	Flow Rate (acfm)	Temperature (^{0}F)
S-002	Cyclones 014, 015	H/R	55	6 x 3	NA	7300	ambient
S-003	EU-006-009, EU-016	V/R	40	1.5	NA	5000	445
S-004	EU-017, Starch Silo baghouse		60	1	NA	25	ambient
S-005	EU-004-007		55	NA	2 x 6	7300	ambient

*Note: Any other emission units not shown on this stack summary, exhaust inside the building.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Administrator that the operation be approved. This recommendation is based on the following facts and conditions:

An application for the purposes of this review was received on April 17, 2006. Additional information was received on October 17 (site visit), November 15, November 18, 2005, January 24, March 16, March 31, April 17, May 3, June 1, June 2, July 28, and July 31, 2006.

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

Emission Calculations

See Appendix A to this TSD (pages 1-20) for detailed emissions calculations. Calculations were submitted by the applicant based on 2004 data, and have been verified and found to be accurate and correct.

Of note, MSOP 097-14600-00314 calculations were based on 2002 data, which showed VOC at 29.62 and PM/PM-10 at 75.25 tons per year (tpy). Utilizing more accurate 2004 potential emission calculations based on maximum throughput, show source-wide PTE of Volatile Organic Compounds (VOC) at 63.894 tpy, and PM/PM-10 below 0.5 tpy. New emission unit (EU-022) has PTE of VOC calculated at 11 tpy, with combined and single Hazardous Air Pollutants (HAP) well below the 25 tpy and 10 tpy thresholds, respectively.

Potential To Emit of Source Before Controls Prior to Revision

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit (PTE) is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (PTE) (tons/year)
PM	0.122
PM-10	0.488
SO2	0.038
NOx	6.415
CO	5.388
VOC	**63.894**

HAPs:	
Single	4.663
Combined	7.071

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of Volatile Organic Compounds (VOC) is greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2004 emission data submitted by the source to OES with the application.

Pollutant	Potential To Emit (tons/year)
PM	0.692
PM-10	0.692
SO_2	0.012
VOC	4.184
CO	1.707
NO_x	2.032
HAPs Single Combined	 negligible 0.125

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-2.5	nonattainment
PM-10	attainment
SO_2	maintenance attainment
NO_2	attainment
8-hour Ozone	basic nonattainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(b) Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions, pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability for the source section.

(c) Marion County has been classified as attainment or unclassifiable in Indiana for PM10, SO_2, NO_2, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

(d) On August 7, 2006, a temporary emergency rule took effect revoking the one-hour ozone standard in Indiana. The Indiana Air Pollution Control Board has approved a permanent rule revision to incorporate this change into 326 IAC 1-4-1. A permanent revision to 326 IAC 1-4-1 will take effect prior to the expiration of the emergency rule.

(e) Fugitive
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD, Part 70, or FESOP Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	Less than 100
PM-10	Less than 100
SO_2	Less than 100
VOC	Less than 100
CO	Less than 100
NO_x	Less than 100
Single HAP	Less than 10
Combination HAPs	Less than 25

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories.

(b) This existing source is not a major stationary source because no nonattainment pollutant is emitted at a rate of 100 tons per year or greater.

(c) These emissions are based on the information provided in the source's operating permit application.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This is the fifth air approval issued to this source.

Federal Rule Applicability

(a) This source is not subject to the New Source Performance Standard, 326 IAC 12, 40 CFR 60, Subpart QQ because this source does not use rotogravure printing. No National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) are included in this permit.

The source does not meet the definition of a major source of hazardous air pollutants (HAPs), as defined in 40 CFR Part 63.2, 40 CFR Part 63 Subpart KK (National Emissions Standards for the Printing and Publishing Industry) and 40 CFR Part 63 Subpart JJJJ (National Emissions Standard for Paper and Other Web Surface Coating Operations). In addition, none of the solvents used by the parts washer permitted by this minor source operating permit contain any of the constituents listed in 40 CFR 63.460(a), 40 CFR 63 Subpart T.

State Rule Applicability - Entire Source

326 IAC 2-1.1-5 (Non-attainment New Source Review)

This source is not major under nonattainment NSR because it has the potential to emit less than 100 tons of PM-10 (as surrogate for PM2.5). Therefore, the Non-attainment New Source Review requirements are not applicable.

326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements)

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD major source levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

326 IAC 2-3 (Emission Offset)

This modification to an existing minor stationary source is not major because the emission increase is less than the Emission Offset major source levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

This source will emit less than ten (10) tons per year of a single HAP or twenty-five (25) tons per year of a combination of HAPs, and construction occurred before July 27, 1997. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-5.1-1 (Particulate Matter Limitations Except Lake County)

Although the source is located in Marion County, it does not have the potential to emit 100 tons per year or greater of particulate matter; and/or actual emissions of 10 tons or more per year of particulate matter. In addition, the source is not one of the sources listed in 326 IAC 6.5-6 (formerly 326 IAC 6-1-12), therefore 326 IAC 6.5-1-1 (formerly 6-1), does not apply.

326 IAC 8-5-5 (Graphic Arts Operations)

This source has no individual facility with the potential to emit greater than or equal to twenty-five (25) tons per year of VOCs. Therefore, 326 IAC 8-5-5 does not apply.

State Rule Applicability - Individual Facilities: (EU-022)

326 IAC 6-3-2 (Particulate Emission Limitations)

Since EU-022 does not generate particulate emissions, this regulation does not apply.

326 IAC 8-1-6 (New facilities; general reduction requirements)

This source has no individual facility with the potential to emit (PTE) greater than or equal to twenty-five (25) tons per year (tpy) of VOCs. EU-022 VOC PTE is at 11 tpy. Therefore, 326 IAC 8-1-6 does not apply.

326 IAC 8-2-5 (Paper Coating Operations)

EU-022 is not subject to 326 IAC 8-2-5 (Paper Coating Operations) because it does not do any web coating or involves saturation processes; nor conducts any flexographic printing operations in line with surface coating lines.

326 IAC 8-5-5 (Graphic Arts Operation)

This source has no individual facility with the PTE greater than or equal to twenty-five (25) tpy of VOC. Therefore, 326 IAC 8-5-5 does not apply.

Conclusion

The operation of this flexographic printing and paperboard production shall be subject to the conditions of the attached 1st Minor Permit Revision, 097-22963-00314, to the Minor Source Operating Permit 097-14600-00314.

The permit is hereby revised as follows. Changes were made to the general permit information, emission unit description, the table of contents, address notifications, and forms as appropriate.

The **bold language is new** language that has been added, and the ~~language with a line through~~ it has been taken out. These are only being used in this letter to emphasize the change made. The permit will reflect the following changes:

SECTION A SOURCE SUMMARY

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

(a) One (1) **Peters, Single Star** paperboard **corrugator** ~~corrugation operation~~, identified as **emission unit (EU-001)**, installed in ~~1998~~ **1989**, with a maximum capacity of seven hundred (700) feet per minute, using a cyclone **to collect trim paper**, identified as ~~014~~ **015, installed in 1989**, ~~to collect trim paper~~, and exhausting to stack **S-002**.

(b) One (1) **Cuir, Mark II,** six (6) color flexographic printing press, identified as **EU-002**, installed in 1996, with a maximum operating capacity of 8,000 sheets per hour, and exhausting ~~to the atmosphere~~ **inside the building**.

(c) One (1) **Saturn II** two (2) color flexographic printing press, identified as **EU-003**, installed in 1989, with a maximum operating capacity of 14,000 sheets per hour, and exhausting ~~to the atmosphere~~ **inside the building**.

(d) One (1) **Ward** two (2) color rotary die cutter, identified as **EU-004**, installed in 1989, with a maximum operating capacity of 8,000 sheets per hour, using a cyclone **to collect trim paper**, identified as 015, ~~to collect trim paper,~~ and exhausting to stack ~~003~~ **S-002**.

~~(e) One (1) Staley two (2) color rotary die cutter, identified as 005, installed in 1991, with a maximum operating capacity of 8,000 sheets per hour, using a cyclone, identified as 015, to collect trim paper, and exhausting to stack 003.~~

(~~f~~ e) One (1) **McKinley** two (2) color rotary die cutter, identified as **EU-006**, installed in 1989, with a maximum operating capacity of 6,000 sheets per hour, using a cyclone **to collect trim paper**, identified as ~~015~~ **014**, ~~to collect trim paper,~~ and exhausting to stack **S-003** ~~3~~ **2**.

(~~g~~ f) One (1) **United** four (4) color rotary die cutter, identified as **EU-007**, installed in 2001, with a maximum operating capacity of 10,800 sheets per hour, using a cyclone for **to collect trim paper**, identified as ~~015~~ **014**, ~~to collect trim paper,~~ and exhausting to stack **S-003** ~~3~~ **2**.

(~~h~~ g) Two (2) **Bobst** platen die cutters, identified as **EU-008** and **EU-009**, installed in 1994 and 2000 respectively, each with a maximum operating capacity of 10,~~8~~ **0**00 sheets per hour, using a cyclone **to collect trim paper**, identified as 015, ~~to collect trim paper,~~ and exhausting to stack **S-003** ~~3~~ **2**.

(~~i~~ h) ~~Four (4)~~ **Three (3) Jagenberg, Jagenberg, J&L** and **Post** specialty folder gluers **respectively**, identified as ~~010,~~ **EU-011**, **EU-012**, and **EU-013**, installed in ~~1989,~~ 1998, 1994, and 2001, respectively, with a collective maximum glue usage of ~~34.25~~ **179.75** pounds per hour, using no controls, and exhausting ~~to the atmosphere~~ **inside the building**.

(~~j~~ i) One (1) **Cleaver Brooks** natural gas fired boiler, identified as **EU-016**, installed in 1988, with a maximum heat input capacity of 14.675 million Btu per hour (MMBtu/hr), exhausting to stack **S-003**.

(~~k~~ j) One (1) corn-based starch silo, identified as **EU-017**, installed in 1999, with a maximum annual capacity for starch throughput of ~~3~~ **2**,000 tons per year, controlled by a baghouse, and exhausting to stack **S-004**.

(~~l~~ **k**) ~~One~~ **Two** (~~1~~ **2**) **Automaton** label laminators, identified as **EU-**018 **and EU-022**, installed in 1994, **and 2006 respectively,** ~~with no emissions~~ **each with a maximum operating capacity of 6,000 and 7,000 sheets per hour respectively, both exhausting inside the building.**

(~~m~~ **l**) Two (2) **International Speed King** tapers, identified as **EU-**019 and **EU-**023, installed in 2001 and 2006 respectively, each with **a maximum operating capacity of 15,000 sheets per hour, each with** emissions below 1 ton per year (tpy), **and exhausting inside the building.**

(~~n~~ **m**) One (1) **Heritage Crystal Clean** small parts washer, identified as **EU-**020, installed in 2 003, with a maximum usage of less than 0.01 gallons per day, **and** exhausting ~~to the atmosphere~~ **inside the building.**

B.12 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to ~~IDEM, OAQ~~ **OES** within thirty (30) calendar days of receipt of a billing.

(~~b~~) ~~The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.~~

(b) The Permittee may call the following telephone number: 317-327-2234 (ask for OES Air Compliance), to determine the appropriate permit fee.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

(a) One (1) **Peters, Single Star** paperboard **corrugator** ~~corrugation operation~~, identified as **emission unit (EU-**001), installed in 1989, with a maximum capacity of seven hundred (700) feet per minute, using a cyclone **to collect trim paper,** identified as ~~014~~ **015, installed in 1989,** ~~to collect trim paper,~~ and exhausting to stack **S-**002.

.....

Emission Limitations and Standards

D.1.1 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate emissions from the paperboard **corrugator** ~~corrugation operation~~ shall be limited by the following:

Interpolation ~~and extrapolation~~ of the data.....

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

(~~a~~ h) ~~Four (4)~~ **Three (3) ~~Jagenberg~~, Jagenberg, J&L** and **Post** specialty folder gluers , identified as ~~010,~~ **EU**-011, **EU**-012, and **EU**-013, installed in ~~1989,~~ 1998, 1994, and 2001, respectively, with a collective maximum glue usage of ~~34.25~~ **179.75** pounds per hour, using no controls, and exhausting ~~to the atmosphere~~ **inside the building**.

(~~c~~ j) One (1) corn-based starch silo, identified as **EU**-017, installed in 1999, with a maximum annual capacity for starch throughput of ~~3~~ **2**,000 tons per year, controlled by a baghouse, and exhausting to stack **S**-004.

(~~i~~ k) ~~One~~ **Two** (~~1~~ **2**) **Automaton** label laminators, identified as **EU**-018 **and EU-022**, installed in 1994, **and 2006 respectively,** ~~with no emissions~~ **each with a maximum operating capacity of 6,000 and 7,000 sheets per hour respectively, both exhausting inside the building.**

(~~m~~ l) Two (2) **International Speed King** tapers, identified as **EU**-019 and **EU**-023, installed in 2001 and 2006 respectively, each with **a maximum operating capacity of 15,000 sheets per hour, each with** emissions below 1 ton per year (tpy), **and exhausting inside the building.**

(~~n~~ m) One (1) **Heritage Crystal Clean** small parts washer, identified as **EU**-020, installed in 2003, with a maximum usage of less than 0.01 gallons per day, **and** exhausting ~~to the atmosphere~~. **inside the building**.

.....

~~There are no applicable conditions for these facilities~~.

.....

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1)]:

(a **b**) One (1) **Cuir, Mark II,** six (6) color flexographic printing press, identified as **EU**-002, installed in 1996, with a maximum operating capacity of 8,000 sheets per hour, and exhausting ~~to the atmosphere~~ **inside the building**.

(~~b~~ **c**) One (1) **Saturn II** two (2) color flexographic printing press, identified as **EU**-003, installed in 1989, with a maximum operating capacity of 14,000 sheets per hour, and exhausting ~~to the atmosphere~~ **inside the building**.

(~~c~~ **d**) One (1) **Ward** two (2) color rotary die cutter, identified as **EU**-004, installed in 1989, with a maximum operating capacity of 8,000 sheets per hour, using a cyclone **to collect trim paper,** identified as 015, ~~to collect trim paper,~~ and exhausting to stack ~~003~~ **S-002**.

~~(d) One (1) **Staley** two (2) color rotary die cutter, identified as 005, installed in 1991, with a maximum operating capacity of 8,000 sheets per hour, using a cyclone, identified as 015, to collect trim paper, and exhausting to stack 003.~~

(e) One (1) **McKinley** two (2) color rotary die cutter, identified as **EU**-006, installed in 1989, with a maximum operating capacity of 6,000 sheets per hour, using a cyclone **to collect trim paper**, identified as ~~015~~ **014**,~~to collect trim paper,~~ and exhausting to stack **S**-00~~3~~ **2**

(f) One (1) **United** four (4) color rotary die cutter, identified as **EU**-007, installed in 2001, with a maximum operating capacity of 10,800 sheets per hour, using a cyclone **to collect trim paper**, identified as ~~015~~ **014**, ~~to collect trim paper,~~ and exhausting to stack **S**-00~~3~~ **2**.

(g) Two (2) **Bobst** platen die cutters, identified as **EU**-008 and **EU**-009, installed in 1994 and 2000 respectively, each with a maximum operating capacity of 10,~~8~~**0**00 sheets per hour, using a cyclone **to collect trim paper,** identified as 015, ~~to collect trim paper,~~ and exhausting to stack **S**-00~~3~~ **2** .

.....

~~There are no applicable conditions for these facilities.~~

.....

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

(~~j~~ **i**) One (1) **Cleaver Brooks** natural gas fired boiler, identified as **EU**-016, installed in ~~1989~~ **1988**, with a maximum heat input capacity of 14.675 million Btu per hour (MMBtu/hr), exhausting to stack **S**-003.

.....

	Appendix A: Emissions Calculations								
	VOC/HAPs from Printing Press Operations								
POTENTIAL EMISSIONS - 2004 DATA									
	Address City IN Zip :		**2135 Stout Field Drive East**						
	MSOP :		**097-14600-00314**						
	1st Minor Revision :		**097-22963-00314**						
	Submitted by :		**TIN Inc. dba Temple-Inland**						
	Reviewed & Verified by:		**Carmen Bugay, 3/2006**						
THROUGHPUT	Max Sheets Per Hour						TSD Appendix A, page 1 of 19		
Press ID	@ 100% Coverage		Max Image Size (in x in)		MMin^2/Year	$MMin^2/hr$			
Cuir EU-002	2,000	52	84		76,527	9			
PTE's for VOC's	Maximum Coverage*		Weight % VOC**		Flash Off %	Throughput	Pounds	EMISSIONS	
	(lbs/MMin^2)					$MMin^2/hr$	of Ink	(TONS/YEAR)	
Inks:	5		1.9912%		100.00%	76,527	382,636.80	3.8095	
Glues									
No Glue used on this machine									
PTE's for HAP's	Maximum Coverage*		Weight % HAP**		Flash Off %	Throughput		EMISSIONS	
	(lbs/MMin^2)		Glycol Ethers			$MMin^2/hr$		(TONS/YEAR)	
Inks:	5		0.3100%		100.00%	76,527		0.5931	
Methodology									
Methodology is the same as stated below on page 12.									

	Appendix A: Emissions Calculations								
	VOC/HAPs from Printing Press Operations								
POTENTIAL EMISSIONS - 2004 DATA									
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	MSOP :	**097-14600-00314**							
	1st Minor Revision :	**097-22963-00314**							
	Submitted by :	**TIN Inc. dba Temple-Inland**							
	Reviewed & Verified by:	**Carmen Bugay, 3/2006**							
THROUGHPUT	Max Sheets Per Hour						TSD Appendix A, page 2 of 19		
Press ID	@ 100% Coverage	Max Image Size (in x in)		MMin^2/Year	$MMin^2/hr$				
Saturn II EU-003	3,600	46	106	153,769.54	18				
PTE's for VOC's	Maximum Coverage*		Weight % VOC**	Flash Off %	Throughput	Pounds	EMISSIONS		
	(lbs/MMin^2)				$MMin^2/hr$	of Ink	(TONS/YEAR)		
Inks:	5		1.9912%	100.00%	153,770	768,847.68	7.6545		
Glues						lbs of Glue			
	1.8		0.9265%		153,769.54	276,785.165	1.2822		
PTE's for HAP's	Maximum Coverage*		Weight % HAP**	Flash Off %	Throughput		EMISSIONS		
	(lbs/MMin^2)		Glycol Ethers		$MMin^2/hr$		(TONS/YEAR)		
Inks:	5		0.3100%	100.00%	153,770		1.1917		
Glues				Flash Off %	Throughput		EMISSIONS		
From V-3869-RB-001			Vinyl Acetate		$MMin^2/hr$		(TONS/YEAR)		
	1.8		0.0419%	100.00%	153,770		0.0580		
From V-3869-RB-001			Formaldehyde						
	1.8		0.0168%	100.00%	153,770		0.0232		
From V-3869-RB-001			Acetaldehyde						
	1.8		0.0837%	100.00%	153,770		0.1158		
From WB-3131			Methanol						
	1.8		0.0210%	100.00%	153,770		0.0291		
Methodology									
Methodology is the same as stated below on page 12.									

	Appendix A: Emissions Calculations								
	VOC/HAPs from Printing Press Operations								
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	Submitted by :	**TIN Inc. dba Temple-Inland**							
	Reviewed & Verified by:	**Carmen Bugay, 3/2006**							
THROUGHPUT	Max Sheets Per Hour						TSD Appendix A, page 3 of 19		
Press ID	@ 100% Coverage	Max Image Size (in x in)		MMin^2/Year	$MMin^2/hr$				
Ward EU-004	2,000	62	76	82,554	9				
PTE's for VOC's	Maximum Coverage*		Weight % VOC**	Flash Off %	Throughput	Pounds	EMISSIONS		
	(lbs/MMin^2)				$MMin^2/hr$	of Ink	(TONS/YEAR)		
Inks:	5		1.9912%	100.00%	82,554	412,771.20	4.1095		
Glues						lbs of Glue			
	1.8		0.9265%		82,554.24	148,597.632	0.6884		
PTE's for HAP's	Maximum Coverage*		Weight % HAP**	Flash Off %	Throughput		EMISSIONS		
	(lbs/MMin^2)		Glycol Ethers		$MMin^2/hr$		(TONS/YEAR)		
Inks:	5		0.3100%	100.00%	82,554		0.6398		
Glues				Flash Off %	Throughput		EMISSIONS		
From V-3869-RB-001			Vinyl Acetate		$MMin^2/hr$		(TONS/YEAR)		
	1.8		0.0419%	100.00%	82,554		0.0311		
From V-3869-RB-001			Formaldehyde						
	1.8		0.0168%	100.00%	82,554		0.0125		
From V-3869-RB-001			Acetaldehyde						
	1.8		0.0837%	100.00%	82,554		0.0622		
From WB-3131			Methanol						
	1.8		0.0210%	100.00%	82,554		0.0156		
Methodology									
Methodology is the same as stated below on page 12.									

	Appendix A: Emissions Calculations								
	VOC/HAPs from Printing Press Operations								
POTENTIAL EMISSIONS - 2004 DATA									
	Address City IN Zip :	**2135 Stout Field Drive East**							
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	Submitted by :	**TIN Inc. dba Temple-Inland**							
	Reviewed & Verified by:	**Carmen Bugay, 3/2006**							
THROUGHPUT	Max Sheets Per Hour						TSD Appendix A, page 4 of 19		
Press ID	@ 100% Coverage	Max Image Size (in x in)		MMin^2/Year	MMin²/hr				
McKinley EU-006	1,500	62	140	114,055	13				
PTE's for VOC's	Maximum Coverage*		Weight % VOC**	Flash Off %	Throughput	Pounds	EMISSIONS		
	(lbs/MMin^2)				MMin²/hr	of Ink	(TONS/YEAR)		
Inks:	5		1.9912%	100.00%	114,055	570,276.00	5.6776		
Glues						lbs of Glue			
	1.8		0.9265%		114,055.20	205,299.360	0.9510		
PTE's for HAP's	Maximum Coverage*		Weight % HAP**	Flash Off %	Throughput		EMISSIONS		
	(lbs/MMin^2)		Glycol Ethers		MMin²/hr		(TONS/YEAR)		
Inks:	5		0.3100%	100.00%	114,055		0.8839		
Glues				Flash Off %	Throughput		EMISSIONS		
From V-3869-RB-001			Vinyl Acetate		MMin²/hr		(TONS/YEAR)		
	1.8		0.0419%	100.00%	114,055		0.0430		
From V-3869-RB-001			Formaldehyde						
	1.8		0.0168%	100.00%	114,055		0.0172		
From V-3869-RB-001			Acetaldehyde						
	1.8		0.0837%	100.00%	114,055		0.0859		
From WB-3131			Methanol						
	1.8		0.0210%	100.00%	114,055		0.0216		
Methodology									
Methodology is the same as stated below on page 12.									

Appendix A: Emissions Calculations

VOC/HAPs from Printing Press Operations

POTENTIAL EMISSIONS - 2004 DATA

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Submitted by :	TIN Inc. dba Temple-Inland
Reviewed & Verified by:	Carmen Bugay, 3/2006

TSD Appendix A, page 5 of 19

THROUGHPUT	Max Sheets Per Hour							
Press ID	@ 100% Coverage	Max Image Size (in x in)		MMin^2/Year	$MMin^2/hr$			
United EU-007	2,700	62	109	159,840	18			
PTE's for VOC's	Maximum Coverage*		Weight % VOC**	Flash Off %	Throughput	Pounds	EMISSIONS	
	(lbs/MMin^2)				$MMin^2/hr$	of Ink	(TONS/YEAR)	
Inks:	5		1.9912%	100.00%	159,840	799,201.08	7.9567	
Glues						lbs of Glue		
	1.8		0.9265%		159,840.22	287,712.389	1.3328	
PTE's for HAP's	Maximum Coverage*		Weight % HAP**	Flash Off %	Throughput		EMISSIONS	
	(lbs/MMin^2)		Glycol Ethers		$MMin^2/hr$		(TONS/YEAR)	
Inks:	5		0.3100%	100.00%	159,840		1.2388	
Glues				Flash Off %	Throughput		EMISSIONS	
From V-3869-RB-001			Vinyl Acetate		$MMin^2/hr$		(TONS/YEAR)	
	1.8		0.0419%	100.00%	159,840		0.0603	
From V-3869-RB-001			Formaldehyde					
	1.8		0.0168%	100.00%	159,840		0.0242	
From V-3869-RB-001			Acetaldehyde					
	1.8		0.0837%	100.00%	159,840		0.1204	
From WB-3131			Methanol					
	1.8		0.0210%	100.00%	159,840		0.0302	
Methodology								
Methodology is the same as stated below on page 12.								

	Appendix A: Emissions Calculations								
	VOC/HAPs from Printing Press Operations								
POTENTIAL EMISSIONS - 2004 DATA									
	Address City IN Zip :	**2135 Stout Field Drive East**							
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	Reviewed & Verified by:	**Carmen Bugay, 3/2006**							
THROUGHPUT							TSD Appendix A, page 6 of 19		
Press ID	Max Sheets Per Hour	Max Image Size (in x in)		MMin^2/Year	$MMin^2/hr$				
Bobst EU-008	10,000	42	60	220,752	25				
PTE's for VOC's									
Inks: ***NO INKS USED***									
PTE's for HAP's									
Inks: ***NO INKS USED***									
Glues									
NO GLUES USED									
THROUGHPUT									
Press ID	Max Sheets Per Hour	Max Image Size (in x in)		MMin^2/Year	$MMin^2/hr$				
Bobst EU-009	10,000	42	60	220,752	25				
PTE's for VOC's									
Inks: ***NO INKS USED***									
PTE's for HAP's									
Inks: ***NO INKS USED***									
Glues: ***NO GLUES USED***									
Methodology									
Methodology is the same as stated below on page 12.									

	Appendix A: Emissions Calculations								
	VOC/HAPs from Printing Press Operations								
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THROUGHPUT							TSD Appendix A, page 7 of 19		
Press ID	Max Sheets Per Hour		Max Image Size (in x in)	MMin^2/Year	$MMin^2/hr$				
Jagenberg EU-011	10,000	80	50	350,400	40				
PTE's for VOC's									
Inks: ***NO INKS USED***									
							EMISSIONS		
Glues						lbs of Glue	(TONS/YEAR)		
	1.8		0.9265%		350,400.00	630,720.000	2.9218		
PTE's for HAP's									
Inks: ***NO INKS USED***									
Glues				Flash Off %	Throughput		EMISSIONS		
From V-3869-RB-001			Vinyl Acetate		$MMin^2/hr$		(TONS/YEAR)		
	1.8		0.0419%	100.00%	350,400		0.1321		
From V-3869-RB-001			Formaldehyde						
	1.8		0.0168%	100.00%	350,400		0.0530		
From V-3869-RB-001			Acetaldehyde						
	1.8		0.0837%	100.00%	350,400		0.2640		
From WB-3131			Methanol						
	1.8		0.0210%	100.00%	350,400		0.0662		
Methodology									
Methodology is the same as stated below on page 12.									

	Appendix A: Emissions Calculations								
	VOC/HAPs from Printing Press Operations								
POTENTIAL EMISSIONS - 2004 DATA									
	Address City IN Zip :	**2135 Stout Field Drive East**							
	MSOP :	**097-14600-00314**							
	1st Minor Revision :	**097-22963-00314**							
	Submitted by :	**TIN Inc. dba Temple-Inland**							
	Reviewed & Verified by:	**Carmen Bugay, 3/2006**							
THROUGHPUT							TSD Appendix A, page 8 of 19		
Press ID	Max Sheets Per Hour	Max Image Size (in x in)		MMin^2/Year	MMin²/hr				
J & L EU-012	4,320	72	144	392,358	44.7898				
PTE's for VOC's									
Inks: ***NO INKS USED***									
							EMISSIONS		
Glues						lbs of Glue	(TONS/YEAR)		
	1.8		0.9265%		392,358.30	706,244.936	3.2717		
PTE's for HAP's									
Inks: ***NO INKS USED***									
Glues				Flash Off %	Throughput		EMISSIONS		
From V-3869-RB-001			Vinyl Acetate		MMin²/hr		(TONS/YEAR)		
	1.8		0.0419%	100.00%	392,358		0.1480		
From V-3869-RB-001			Formaldehyde						
	1.8		0.0168%	100.00%	392,358		0.0593		
From V-3869-RB-001			Acetaldehyde						
	1.8		0.0837%	100.00%	392,358		0.2956		
From WB-3131			Methanol						
	1.8		0.0210%	100.00%	392,358		0.0742		
Methodology									
Methodology is the same as stated below on page 12.									

Appendix A: Emissions Calculations

VOC/HAPs from Printing Press Operations

POTENTIAL EMISSIONS - 2004 DATA

Address City IN Zip :	**2135 Stout Field Drive East**
MSOP :	**097-14600-00314**
1st Minor Revision :	**097-22963-00314**
Submitted by :	**TIN Inc. dba Temple-Inland**
Reviewed & Verified by:	**Carmen Bugay, 3/2006**

THROUGHPUT							
Press ID	Max Sheets Per Hour	Max Image Size (in x in)		MMin^2/Year	MMin²/hr		
Post EU-013	10,000	80	50	350,400	40		
PTE's for VOC's							
Inks: ***NO INKS USED***							EMISSIONS
					MMin²/hr	lbs of Glue	(TONS/YEAR)
Glues	1.8		0.9265%		350,400.00	630,720.000	2.9218
PTE's for HAP's							
Inks: ***NO INKS USED***							
				Flash Off %	Throughput		EMISSIONS
Glues			Vinyl Acetate		MMin²/hr		(TONS/YEAR)
From V-3869-RB-001	1.8		0.0419%	100.00%	350,400		0.1321
			Formaldehyde				
From V-3869-RB-001	1.8		0.0168%	100.00%	350,400		0.0530
			Acetaldehyde				
From V-3869-RB-001	1.8		0.0837%	100.00%	350,400		0.2640
			Methanol				
From WB-3131	1.8		0.0210%	100.00%	350,400		0.0662
Methodology							
Methodology is the same as stated below on page 12.							

	Appendix A: Emissions Calculations								
	VOC/HAPs from Printing Press Operations								
POTENTIAL EMISSIONS - 2004 DATA									
	Address City IN Zip :	**2135 Stout Field Drive East**							
	MSOP :	**097-14600-00314**							
	1st Minor Revision :	**097-22963-00314**							
	Submitted by :	**TIN Inc. dba Temple-Inland**							
	Reviewed & Verified by:	**Carmen Bugay, 3/2006**							
THROUGHPUT							TSD Appendix A, page 10 of 19		
Press ID	Max Sheets Per Hour	Max Image Size (in x in)		MMin^2/Year	MMin^2/hr				
Automaton EU-018	6,000	54	78	221,383	25				
WB-1164									
PTE's for VOC's	Maximum Coverage*		Weight % VOC**	Flash Off %	Throughput	Pounds	EMISSIONS		
	(lbs/MMin^2)				MMin^2/hr	of Glue	(TONS/YEAR)		
Glues	50		0.1740%	100.00%	221,383	11,069,136.00	9.6301		
PTE's for HAP's									
Inks: ***NO INKS USED***									
Glues									
WB-1164	Contains NO HAPS								
Press ID	Max Sheets Per Hour	Max Image Size (in x in)		MMin^2/Year	MMin^2/hr				
Speed King (Int'l Taper) EU-019	15,000	12	24	37,843	4				
Valco CS-1952									
PTE's for VOC's	Maximum Coverage*		Weight % VOC**	Flash Off %	Throughput	Pounds	EMISSIONS		
	(lbs/MMin^2)				MMin^2/hr	of Glue	(TONS/YEAR)		
Glues	1.8		0.0000%	100.00%	37,843	68,117.76	0.0000		
PTE's for HAP's									
Inks: ***NO INKS USED***									
Glues									
Valco CS-1952									
Methodology									
Methodology is the same as stated below on page 12.									

	Appendix A: Emissions Calculations								
	VOC/HAPs from Printing Press Operations								
POTENTIAL EMISSIONS - 2004 DATA									
	Address City IN Zip :	**2135 Stout Field Drive East**							
	MSOP :	**097-14600-00314**							
	1st Minor Revision :	**097-22963-00314**							
	Submitted by :	**TIN Inc. dba Temple-Inland**							
	Reviewed & Verified by:	**Carmen Bugay, 3/2006**							
Press ID	Max Sheets Per Hour	Max Image Size (in x in)		MMin^2/Year	MMin^2/hr		TSD Appendix A, page 11 of 19		
Speed King (Int'lTaper) EU-023	15,000	12	24	37,843	4				
PTE's for VOC's	Maximum Coverage*		Weight % VOC**	Flash Off %	Throughput	Pounds	EMISSIONS		
	(lbs/MMin^2)				MMin^2/hr	of Glue	(TONS/YEAR)		
Glues	1.8		0.0000%	100.00%	37,843	68,117.76	0.0000		
PTE's for HAP's	Maximum Coverage*		Weight % HAP	Flash Off %	Throughput	Pounds	EMISSIONS		
Glues	(lbs/MMin^2)				MMin^2/hr	of Glue	(TONS/YEAR)		
	1.8		0.1451%	100.00%	37,843	68,117.76	0.0494		
Covalence 0739P/0740P, 0760/0761, 07425/07435							(pounds/year)		
							98.84		
THROUGHPUT									
Press ID	Max Sheets Per Hour	Max Image Size (in x in)		MMin^2/Year	MMin^2/hr				
Automaton EU-022	7,000	54	78	258,280	29				
WB-1164									
PTE's for VOC's	Maximum Coverage*		Weight % VOC**	Flash Off %	Throughput	Pounds	EMISSIONS		
	(lbs/MMin^2)				MMin^2/hr	of Glue	(TONS/YEAR)		
Glues	50		0.1740%	100.00%	258,280	12,913,992.00	11.2352		
PTE's for HAP's									
Inks: ***NO INKS USED***									
Glues									
WB-1164	Contains NO HAPS								
Methodology									
Methodology is the same as stated below on page 12.									

Appendix A: Emissions Calculations

VOC/HAPs from Printing Press Operations

POTENTIAL EMISSIONS - 2004 DATA

Address City IN Zip :	2135 Stout Field Drive East
MSOP :	097-14600-00314
1st Minor Revision :	097-22963-00314
Submitted by :	TIN Inc. dba Temple-Inland
Reviewed & Verified by:	Carmen Bugay, 3/2006

		Summary	
		PTE VOCs (Tons/Year)	PTE HAPs (Tons/Year)
Potential Pounds/year of Ink	2,933,733		
Actual pounds/year of Ink 2005	287,003	63.4429	6.9546
Potential Pounds/year of Glue	26,937,325		Glycol Ethers
Actual pounds/year 2005	26,937,325		(Tons/Year)
			4.5473
			Vinyl Acetate
			0.6046
			Formaldehyde
			0.2424
			Acetaldehyde
			1.2078
			Methanol
			0.3030

METHODOLOGY

Throughput = Maxium line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MMin^2 per Year

VOC (ton/yr)= Maximum Coverage pounds per MMin^2 * Weight percentage volatiles (water minus organics) * Flash off * Throughput in MMin^2 per hr * 1 Ton per 2000 lb.

HAP (ton/yr)= Maximum Coverage pounds per MMin^2 * Weight percentage HAP (water minus organics) * Flash off * Throughput in MMin^2 per hour * 1 Ton per 2000 lb.

Note 1: Total emissions based on rated capacity at 8,760 hours/year. *Maximum hourly usage based on data from 2004 operations as provided by the source.

Note 2: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%.

Note 3: All run speeds are calculated at full coverage, which is 25% of Max. Operating Capacity.

Appendix A: Emissions Calculations
Natural Gas Combustion -
Company Name: TIN Inc., d/b/a Temple Inland
Address City IN Zip: 2135 Stout Field Drive East
Permit Number: MSOP 097-14600-00314
1st Minor Revision : 097-22963-00314
Reviewed & Verified by: Carmen Bugay, 03/2006

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
14.645	128.3

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.1219	0.4875	0.0385	6.4145	0.3528	5.3882

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

METHODOLOGY

326 IAC 6-2-4

0.1219 ton/yr x 2,000 lb/ton / (8,760 hr/yr x 14.65 MMBtu/hr) = **0.0019** lb/MMBtu

Emission Factors:

1) All emission factors are based on normal firing.
   a) MMBtu = 1,000,000 Btu
   b) MMCF = 1,000,000 Cubic Feet of Gas

2) Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Potential Throughput:

3) Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF / 1,000 MMBtu

Emissions:

4) Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF) / 2,000 lb/ton

Appendix A: Emissions Calculations
Natural Gas Combustion -
Company Name: TIN Inc., d/b/a Temple Inland
Address City IN Zip: 2135 Stout Field Drive East
Permit Number: MSOP 097-14600-00314
1st Minor Revision : 097-22963-00314
Reviewed & Verified by: Carmen Bugay, 03/2006

HAPs - Metals

	Arsenic	Beryllium	Cadmium	Chromium	Lead
Emission Factor in lb/MMcf	2.0E-04	1.2E-05	1.1E-03	1.4E-03	0.0E+00
Potential Emission in tons/yr	1.283E-05	7.697E-07	7.056E-05	8.980E-05	0.000E+00

	Mercury	Manganese	Nickel	Selenium	**Total HAPS Metals**
Emission Factor in lb/MMcf	2.6E-04	3.8E-04	2.1E-03	2.4E-05	
Potential Emission in tons/yr	1.668E-05	2.438E-05	1.347E-04	1.539E-06	3.513E-04

HAPs - Organics

	Methylnapthale	3-Methyl-chloranthrene	7,12-Dimethylbenz(a) anthrancene	Acenapthene	Acenapthylene
Emission Factor in lb/MMcf	2.4E-05	1.8E-06	1.6E-06	1.8E-06	1.8E-06
Potential Emission in tons/yr	1.539E-06	1.155E-07	1.026E-07	1.155E-07	1.155E-07

	Anthracene	Benz(a) anthracene	Benzene	Benzo(a) pyrene	Benzo(b) flouranthene
Emission Factor in lb/MMcf	2.4E-06	1.8E-06	2.1E-03	1.2E-06	1.8E-06
Potential Emission in tons/yr	1.539E-07	1.155E-07	1.347E-04	7.697E-08	1.155E-07

	Benzo(g,h,i,) perylene	Benzo(k) flouranthene	Chysene	Dibenzo(a,h) anthracene	Dichlorobenzene
Emission Factor in lb/MMcf	1.2E-06	1.8E-06	1.8E-06	1.2E-06	1.2E-03
Potential Emission in tons/yr	7.697E-08	1.155E-07	1.155E-07	7.697E-08	7.697E-05

	Fluoranthene	Fluorene	Formaldehyde	Hexane	Indeno(1,2,30cd) pyrene
Emission Factor in lb/MMcf	3.0E-06	2.8E-06	7.5E-06	1.8E+00	1.8E-06
Potential Emission in tons/yr	1.924E-07	1.796E-07	4.811E-07	1.155E-01	1.155E-07

	Naphthalene	Phenanathrene	Pyrene	Toluene	**Total HAPs Organics**
Emission Factor in lb/MMcf	6.1E-04	1.7E-05	5.0E-06	3.4E-03	
Potential Emission in tons/yr	3.913E-05	1.090E-06	3.207E-07	2.181E-04	1.159E-01

METHODOLOGY

The methodology is the same as on page 13.

Appendix A: Emission Calculations - 2004 Data
Parts Washer

Address City IN Zip : 2135 Stout Field Drive East
MSOP : 097-14600-00314
1st Minor Revision : 097-22963-00314
Submitted by : TIN Inc. dba Temple-Inland
Reviewed & Verified by: Carmen Bugay, 3/2006

Emission Unit: EU-020

					Petroleum Naptha	
Parts Washer from Heritage-Crystal Clean		Size (gallons)	Max Potential Quantity Loss/ yr		Percent	lbs
- Crystal Clean 100+		30	30	6.54 lbs / gal	100%	196.20000
					0%	0.00000

					Tetrachloroethylene		1,1-Dichloro-1-Fluoroethane		Diethylene Glycol Monobutyl Ether	
Zep Manufacturing		Size (ounces)	Quantity / yr		Percent	lbs	Percent	lbs	Percent	lbs
- Zep Solv	Aerosol	12	24	13.43 lbs / gal	95%	2.13750	0%	0.00000	0%	0.00000
- Zep Elec II	Aerosol	12	48	13.43 lbs / gal	0%	0.00000	95%	4.27500	5%	0.22500
				0.00 lbs / gal	5%	0.00000	0%	0.00000	0%	0.00000
				0.00 lbs / gal	0%	0.00000	0%	0.00000	0%	0.00000
				0.00 lbs / gal	10%	0.00000	0%	0.00000	10%	0.00000
				0.00 lbs / gal	0%	0.00000	0%	0.00000	0%	0.00000
				0.00 lbs / gal	0%	0.00000	0%	0.00000	0%	0.00000
				0.00 lbs / gal	0%	0.00000	0%	0.00000	0%	0.00000
						2.13750		4.27500		0.22500

Total VOC	Run days in 2005	PTE VOC (Tons)
0.22500	200	0.00493

Total HAP	Run days in 2005	PTE HAP (Tons)
2.13750	200	0.04681

Methodology

Potential to Emit (PTE) VOC lbs/yr = Maximum usage per year (size x quantity) x density (lb/gallon) / 128 oz/gallon x % VOC content
Potential to Emit (PTE) VOC ton/yr = PTE VOC lbs/yr x 8,760 hours/yr x 1 ton / 2,000 lbs / run days/yr
Potential to Emit (PTE) HAP lbs/yr = Maximum usage per year (size x quantity) x density (lb/gallon) / 128 oz/gallon x % HAP content
Potential to Emit (PTE) HAP ton/yr = PTE HAP lbs/yr x 8,760 hours/yr x 1 ton / 2,000 lbs / run days/yr

Appendix A: Emissions Calculations

Printing Press / Cyclone Operations

POTENTIAL EMISSIONS -2004 DATA

Company Name	**TIN Inc. dba Temple-Inland**
Address City IN Zip :	**2135 Stout Field Drive East, Indianapolis, Indiana 46241**
MSOP :	**097-14600-00314**
1st Minor Revision :	**097-22963-00314**
Reviewed & Verified by:	**Carmen Bugay, 07/2006**

THROUGHPUT

Press ID	Max Sheets Per Hour	Max Image Size (in x in)		MMin^2/Year	$MMin^2/hr$
Automaton EU-022	7,000	54	78	258,280	29

WB-1164							
PTE's for VOC's	Maximum Coverage*		Weight % VOC**	Flash Off %	Throughput	Pounds	EMISSIONS
	(lbs/MMin^2)				$MMin^2/hr$	of Glue	(TONS/YEAR)
Glues	50		0.1740%	100.00%	258,280	12,913,992.00	11.2352

PTE's for HAP's							
Inks: *NO INKS USED*							
Glues							
WB-1164	Contains NO HAPS						

METHODOLOGY

Throughput = Maxium line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MMin^2 per Year

VOC (ton/yr)= Maximum Coverage pounds per MMin^2 * Weight percentage volatiles (water minus organics) * Flash off * Throughput in MMin^2 per hr * 1 Ton per 2000 lb.

HAP (ton/yr)= Maximum Coverage pounds per MMin^2 * Weight percentage HAP (water minus organics) * Flash off * Throughput in MMin^2 per hour * 1 Ton per 2000 lb.

Note 1: Total emissions based on rated capacity at 8,760 hours/year. *Maximum hourly usage based on data from 2004 operations as provided by the source.

Note 2: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%.

Note 3: All run speeds are calculated at full coverage, which is 25% of Max. Operating Capacity.

Appendix A: Uncontrolled (PTE) Emissions Calculations
Particulate Emissions

Company Name: TIN Inc., d/b/a Temple Inland
Address City IN Zip: 2135 Stout Field Drive East
Permit Number: MSOP 097-14600-00314
1st Minor Revision : 097-22963-00314
Reviewed & Verified by: Carmen Bugay, 7/2006

Unit	Process	Units processed		Unit Weight lbs / sf (174 lbs/mmsf)	Maximum Throughput		PM Emission Factor (lb/ton)	Uncontrolled PM Emissions (ton/yr)	Uncontrolled PM-10 Emissions (ton/yr)
					lb/hr	ton/yr			
EU-001	Corrugator *a	130,000.000	sf/hr	0.0001740	22.62000	99.076	0.006	0.39000	
EU-002	Cutr Press *b	No PM							
EU-003	Saturn II	180,556	sq.ft/hr	0.0001740	31.41667	137.605		0.00000	
EU-004	Ward	183,333	sq.ft/hr	0.0001740	31.90000	139.722		0.00000	
EU-006	McKinley	310,000	sq.ft/hr	0.0001740	53.94000	236.257		0.00000	
EU-007	United	258,958	sq.ft/hr	0.0001740	45.05875	197.357		0.00000	
EU-008	Bobst	175,000	sq.ft/hr	0.0001740	30.45000	133.371		0.00000	
EU-009	Bobst	175,000	sq.ft/hr	0.0001740	30.45000	133.371		0.00000	
EU-011	Jagenberg	277,778	sq.ft/hr	0.0001740	48.33333	211.700		0.00000	
EU-012	J & L	311,040	sq.ft/hr	0.0001740	54.12096	237.050		0.00000	
EU-013	Post	444,444	sq.ft/hr	0.0001740	77.33333	338.720		0.00000	
EU-016	Cleaver Brooks Boiler	* d							
EU-017	Starch Silo *c	4,000,000	lbs/yr	1.00	456.621	2,000.000	0.18	0.18000	0.18000
EU-018	Automaton *b	No PM					0	0.00000	
EU-019	Speed King (Int'l Taper) *b	No PM					0	0.00000	
EU-020	Parts Washer * b	No PM					0	0.00000	
EU - 022	**Automaton * b**	**No PM**					0	0.00000	
EU-023	Speed King Taper *b	No PM					0	0.00000	
	TOTAL							**0.57000**	**0.18000**

*a - EU-001 Emission based upon msf, not on weight. Emission factor is industry specific and as provided by source.
*b - EU-002, EU-018, EU-019, EU-020, EU-022 have no PM Emissions
*c - EU-017 emission factor is as specified below in c).

METHODOLOGY

1) **Throughput:**

a) Maximum Throughput (EU-003 through EU-013) in ton/yr = pieces cut (sq.ft per hour) x 8760 hr/yr x 174 lb/1,000,000 sq.ft x 1ton/2000 lb

b) EU-014 and EU-1015 are in lbs/hr, therefore there is no weight conversion.

c) EU-017 is based upon potential at the silo in lbs/yr
- Emission factor for EU-017 is based upon AP-42, Chapter 9.9.1, Table 9.9.1-1 particulate emission factors for grain elevators, SCC 3-02-005-51 for grain loading.

2) **Uncontrolled Particulate Matter (PM) Emissions:**

a) Uncontrolled PM Emissions (ton/yr) = Maximum Throughput (ton/yr) * PM Emission Factor (lb/ton) / 2000 (lb/ton)

Appendix A: Uncontrolled (PTE) Emissions Calculations

Company Name: VOC and HAP Emissions
Address City IN Zip: TIN Inc., d/b/a Temple Inland
Permit Number: 2135 Stout Field Drive East
1st Minor Revision : 097-22963-00314
Reviewed & Verified by: Carmen Bugay, 7/2006

Unit	Process	Maximum Throughput (lb/hr)	Maximum Throughput (ton/yr)	Uncontrolled VOC Content (%)	Emission Factor	Uncontrolled Total VOC Emissions (ton/yr)	Uncontrolled Total HAP Emissions (ton/yr)	Uncontrolled Highest Single HAP (glycol ethers*) ton/yr
EU-002	Cuir Press	43.68	191.3184	1.99%	0.0199	3.8095	0.5931	0.5931
EU-003	Saturn II	87.768	384.4238	1.99%	0.0199	7.6546	1.1917	1.1917
	- Gluing	31.59648	138.3926	0.9265%	0.009265	1.2822	0.2261	
EU-004	Ward	47.12	206.3856	1.99%	0.0199	4.10955	0.6398	0.6398
	- Gluing	16.9632	74.2988	0.9265%	0.009265	0.6884	0.1214	
EU-006	McKinley	65.1	285.1380	1.99%	0.0199	5.6777	0.8839	0.8839
	- Gluing	23.436	102.6497	0.9265%	0.009265	0.9510	0.1677	
EU-007	United	91.233	399.6005	1.99%	0.0199	7.9568	1.2388	1.2388
	- Gluing	32.84388	143.8562	0.9265%	0.009265	1.3328	0.2351	
EU-011	Jagenberg							
	- Gluing	72	315.36	0.9265%	0.009265	2.9218	0.5153	
EU-012	J & L							
	- Gluing	80.622	353.122	0.9265%	0.009265	3.2717	0.5770	
EU-013	Post							
	- Gluing	72	315.36	0.9265%	0.009265	2.9218	0.5153	
EU-018	Automaton							
	- Gluing	0.8219	5534.568	0.1740%	0.00174	9.6301		
EU-019	International Taper	No VOCs				0.0000		
EU-22	Automatan							
	- Gluing	0.8219	6,457.00	0.1740%	0.00174	11.2352		
EU-023	International (Speed King) Taper	No VOCs	34.0589					
	- Gluing					0.0000	0.04942	
EU-020	Parts Washer					0.0049275	0.04681	
	TOTAL					**63.4433**	**6.9546**	**4.5473**

*Note: Manufacturer % content of Glycol ethers is propriatory and could not be obtained or verified by the source, therefore they could not be taken off the HAP list (EPA removed glycol ethers with CAS No. 111-76-2 of the HAP list on November 29, 2004, 69FR69320). Therefore, glycol ethers were counted in the HAP calculations.

1) Emission Factors:

a) VOC & HAP emission factors are industry specific and as provided by the source and manufacturer.

b) Emission factors for EU-011, EU-012, and EU-013 are based upon worst possible case for glue.
- facility uses three glues, emission factor is for the highest VOC content glue, not necessarily the glue that will be used.

c) Emission Units EU-018 and EU-022 use glue WB-1164

2) Uncontrolled VOC Emissions

a) Total VOC Emissions (ton/yr) = Maximum Throughput (ton/yr) x Emission Factor

b) Total HAP Emissions (ton/yr) = Maximum Throughput (ton/yr) x Emission Factor

Appendix A: Emission Calculations
TOTAL SOURCE-WIDE UNCONTROLLED EMISSIONS

Address City IN Zip: 2135 Stout Field Drive East, Indianapolis, IN
FESOP: MSOP 097-14600-00314
1st Minor Revision: 097-22963-00314
Submitted by: TIN Inc., d/b/a Temple Inland
Reviewer: Carmen Bugay, 07/2006

Uncontrolled Source-Wide Potential Emissions (tons/year)

	Emissions Generating Activity			
Pollutant	Natural Gas Combustion	Printing Presses (Converting)	Pre-press and Folders/Gluers	**TOTALS**
PM	0.122	0.000		0.122
PM10	0.488	0.000		0.488
SO2	0.038	0.000		0.038
NOx	6.415	0.000		6.415
VOC	0.353	63.443	0.09810	**63.894**
CO	5.388	0.000		5.388
Total all HAPs	0.116	6.955		**7.071**
worst case single HAP	0.115 (hexane)	4.547 (glycol ether)		**4.663**

Note: Total emissions based on 8,760 hours/year.